

The Wadeable Streams Assessment

What is the Wadeable Streams Assessment?

The Wadeable Streams Assessment (WSA) is a study of the ecological condition of small streams throughout the U.S. It is designed like an opinion poll: that is, 500 sites were selected at random to represent the condition of all streams in regions that share similar ecological characteristics. This is the first time a national monitoring study of streams has been conducted using this approach.

This work is being conducted by State water quality agencies with support from the U.S. Environmental Protection Agency using the same types of methods at all sites, to ensure results that can be compared across the country. Sampling began in June 2004 and will continue until October 2004.

In addition to providing information on the condition and health of small streams, this project provides funding and expertise that will enhance each State's ability to monitor and assess the quality of its waters in the future.

What Will be Studied at Each Site?

At each site, a small crew of scientists will examine biological, chemical, and physical conditions. Depending on ease of access, weather conditions and other factors, monitoring at each site should take about six hours.

To check the biological health of the site, the sampling crew will collect *macroinvertebrates* (organisms without backbones that are large enough to be seen with the naked eye, such as mayfly nymphs, snails and crayfish) for identification and analysis



in a lab. The abundance and variety of macroinvertebrates can tell scientists whether a stream is healthy or stressed.

Water samples will be taken from the stream and analyzed in the lab for a set of basic characteristics. The crew will also visually assess the physical condition of the streambed, streambanks, and vegetation surrounding the stream.

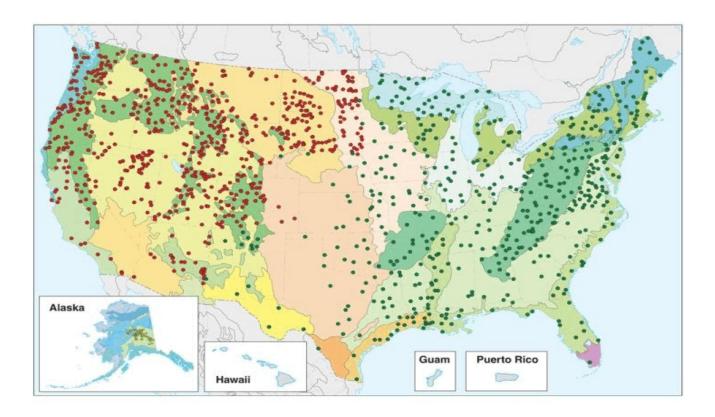
When Will the Findings Be Ready?

Results from the study will be available in 2005. Information on the condition of individual sites will *not* be included in the national summary report. The final report will be used to draw regional and national conclusions about the health of small, wadeable streams and will help water quality agencies understand stream conditions over time.

For more information visit:

www.epa.gov/owow/monitoring/wsa or contact: Susan Holdsworth, (202) 566-1187, Holdsworth.Susan@epa.gov





Wadeable Streams Assessment Sampling Sites. The green dots on this map represent sites that will be sampled in the summer of 2004. The red dots represent sites that have already been sampled.





Above: Conducting a visual assessment of the physical condition of streambanks and vegetation.

Left: Collecting macroinvertebrates (biological organisms) from the streambed. These samples will be sent to a lab for identification.